

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO
10/083,677	02/25/2002	Michele M. Covell	YES-002	9440
7590 03/03/2005		EXAMINER		
David R. Grah			PENDLETO	N, BRIAN T
1337 Chewpon Avenue Milpitas, CA 95035			ART UNIT	PAPER NUMBER
			2644	
			DATE MAILED: 03/03/200	5

Please find below and/or attached an Office communication concerning this application or proceeding.

		Application No.	Applicant(s)				
Office Action Summary		10/083,677	COVELL ET AL.				
		Examiner	Art Unit				
	•	Brian T. Pendleton	2644				
	The MAILING DATE of this communication a						
Period fo							
THE - External after - If the - If NC - Failu Any	ORTENED STATUTORY PERIOD FOR REF MAILING DATE OF THIS COMMUNICATION nsions of time may be available under the provisions of 37 CFR SIX (6) MONTHS from the mailing date of this communication. It period for reply specified above is less than thirty (30) days, a reperiod for reply is specified above, the maximum statutory perior to reply within the set or extended period for reply will, by state reply received by the Office later than three months after the material patent term adjustment. See 37 CFR 1.704(b).	N. 1.136(a). In no event, however, may a reply eply within the statutory minimum of thirty (30 od will apply and will expire SIX (6) MONTHS tute, cause the application to become ABANE	be timely filed D) days will be considered timely. From the mailing date of this communication. DONED (35 U.S.C. § 133).				
Status							
1)[🛛	Responsive to communication(s) filed on 25	February 2002.					
·		his action is non-final.					
3)□	, <u> </u>						
	closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.						
Dispositi	on of Claims	·					
4) 🛛	4)⊠ Claim(s) <u>1-4</u> is/are pending in the application.						
	4a) Of the above claim(s) is/are withdrawn from consideration.						
	☐ Claim(s) <u>4</u> is/are allowed.						
6)⊠	Claim(s) <u>1-3</u> is/are rejected.						
7)	Claim(s) is/are objected to.						
8)[Claim(s) are subject to restriction and/or election requirement.						
Applicati	on Papers						
9)	The specification is objected to by the Exami	ner.					
10)⊠ The drawing(s) filed on <u>25 February 2002</u> is/are: a)⊠ accepted or b)□ objected to by the Examiner.							
•	Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).							
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.							
Priority u	ınder 35 U.S.C. § 119						
12)	Acknowledgment is made of a claim for forei	gn priority under 35 U.S.C. § 11	9(a)-(d) or (f).				
a) ☐ All b) ☐ Some * c) ☐ None of:							
1. Certified copies of the priority documents have been received.							
	2. Certified copies of the priority docume		ication No				
	$3.\square$ Copies of the certified copies of the pr	iority documents have been rec	ceived in this National Stage				
	application from the International Bure						
* S	see the attached detailed Office action for a li	st of the certified copies not rec	eived.				
Attachmen	` '						
1) Notice of References Cited (PTO-892) 4) Interview Summary (PTO-413) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) Paper No(s)/Mail Date							
3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) 5) Notice of Informal Patent Application (PTO-152)							
Paper No(s)/Mail Date 6) Other:							

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1 and 2 are rejected under 35 U.S.C. 102(b) as being anticipated by McCutchen, US Patent 5,040,081. McCutchen discloses an audiovisual synchronization method using audio signature comparison comprising first and second sets of high resolution (audio) data from a slave and master video source (figure 4), an analyzer 78 and synchronizer 80. The analyzer 78 digitizes the audio data from the video sources (A/D converter 43) and holds the data to a spectral frame buffer 44. Column 6 lines 45-59 disclose that an envelope information analysis concerns itself with the amplitude (magnitude) of the inputted signals. The data from the spectral frames are inputted to cross-correlator board 55. The table in column 9 discloses that the "lock" comparison buffer for envelope values is done over one video frame or compared 10 at a time. Thus, McCutchen discloses computing a magnitude only spectrogram for the sets of high resolution data and having a spectrogram slice length and step size that is 1/29.27 second (1 video frame). The cross-correlator board 55 computes a one-dimensional cross-correlation of the magnitudes and selects an alignment based on the cross-correlation. Claims 1 and 2 are met.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

Art Unit: 2644

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over McCutchen.

McCutchen does not disclose that the cross-correlation further comprises performing a FFTbased one-dimensional convolution method. However, it was well known and practiced in the
art at the time of invention to use such cross-correlation methods and it would have been obvious
to one of ordinary skill in the art to use the claimed method for its appropriate benefits.

Allowable Subject Matter

Claim 4 is allowed.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Lu, US Patent 6,751,360; Hu, US Patent 6,483,538.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian T. Pendleton whose telephone number is (703) 305-9509. The examiner can normally be reached on M-F 7-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sinh Tran can be reached on (703) 305-4040. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Application/Control Number: 10/083,677 Page 4

Art Unit: 2644

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Brian T. Pendleton Examiner Art Unit 2644

1.25